

Title (en)

A METHOD AND AN APPARATUS FOR RECYCLING DIFFERENT COMPONENTS IN A MULTIPLE LAYER MATERIAL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR WIEDERAUFBEREITUNG DER VERSCHIEDENEN KOMPONENTEN EINES MEHRLAGIGEN MATERIALS

Title (fr)

PROCEDE ET APPAREIL DE RECYCLAGE DES DIFFERENTS CONSTITUANTS D'UN MATERIAU MULTICOUCHES

Publication

**EP 0932447 A1 19990804 (EN)**

Application

**EP 97928603 A 19970617**

Priority

- SE 9701076 W 19970617
- SE 9602481 A 19960624

Abstract (en)

[origin: WO9749494A1] A method of recovering the different components of multiple layer materials, for instance consisting of pieces (20) of paper, plastic and aluminium foil, comprises delivering the material to the infeed zone (4) of a refiner or disperser (2) that includes mutually opposing discs (5; 6) which include material engagement surfaces or material engagement elements (5a; 6a) and which rotate relative to one another. The gap between the discs (5; 6) is adjusted so that the material present therebetween will be subjected to shear forces that result in rapid mutual separation of the various layers of material. Separated pieces (20'; 20'') of the various layers are pumped in the form of a suspension to a horizontal, rotating, perforated drum (3) which includes an inner screw feeder and to which further suspension or dilution liquid is supplied. Suspended readily slushed or pulped material pieces depart through perforations (3a), whereas layer material (20'') that is not readily slushed or pulped is discharged through one end of the drum. The invention also relates to plant that operates in accordance with the inventive method.

IPC 1-7

**B02C 23/08**

IPC 8 full level

**B09B 5/00** (2006.01); **B02C 7/06** (2006.01); **B02C 23/10** (2006.01); **B03B 1/00** (2006.01); **B03B 9/06** (2006.01); **B07B 1/20** (2006.01); **D21B 1/02** (2006.01)

CPC (source: EP US)

**B02C 7/06** (2013.01 - EP US); **B02C 23/10** (2013.01 - EP US); **B03B 1/00** (2013.01 - EP US); **B03B 9/061** (2013.01 - EP US); **B07B 1/20** (2013.01 - EP US); **B29B 17/02** (2013.01 - EP US); **D21B 1/026** (2013.01 - EP US); **B29B 17/0412** (2013.01 - EP US); **B29B 2017/0217** (2013.01 - EP US); **B29B 2017/0237** (2013.01 - EP US); **B29B 2017/0251** (2013.01 - EP US); **B29B 2017/0484** (2013.01 - EP US); **B29K 2705/02** (2013.01 - EP US); **B29K 2711/12** (2013.01 - EP US); **B29L 2007/00** (2013.01 - EP US); **B29L 2009/00** (2013.01 - EP US); **B29L 2009/003** (2013.01 - EP US); **B29L 2009/005** (2013.01 - EP US); **B29L 2031/7158** (2013.01 - EP US); **Y02W 30/52** (2015.05 - EP US); **Y02W 30/62** (2015.05 - EP US)

Citation (search report)

See references of WO 9749494A1

Cited by

WO2016087220A1

Designated contracting state (EPC)

AT CH DE DK FI FR GB IT LI

DOCDB simple family (publication)

**WO 9749494 A1 19971231**; AT E216915 T1 20020515; CA 2258968 A1 19971231; DE 69712353 D1 20020606; DE 69712353 T2 20021031; DK 0932447 T3 20020819; EP 0932447 A1 19990804; EP 0932447 B1 20020502; JP 2000513267 A 20001010; NO 986123 D0 19981223; NO 986123 L 19990224; SE 506804 C2 19980216; SE 9602481 D0 19960624; SE 9602481 L 19971225; US 6206199 B1 20010327

DOCDB simple family (application)

**SE 9701076 W 19970617**; AT 97928603 T 19970617; CA 2258968 A 19970617; DE 69712353 T 19970617; DK 97928603 T 19970617; EP 97928603 A 19970617; JP 50280798 A 19970617; NO 986123 A 19981223; SE 9602481 A 19960624; US 20281999 A 19990830